



---

---

## **MEMORANDUM**

---

---

**TO:** SHELLEY POTICHA, CENTER FOR TOD; VALERIE KNEPPER AND JAMES CORLESS, MTC  
**FROM:** TIMOTHY ROOD AND ERIC YURKOVICH, CALTHORPE ASSOCIATES  
**SUBJECT:** MTC CASE STUDY RECOMMENDATIONS – TASK 6A  
**DATE:** JANUARY 12, 2005

This memorandum summarizes our recommendations for case studies for the Metropolitan Transportation Commission's Transit-Oriented Development Policy Study. It also includes a description of the anticipated scope of work for the case study process.

### **1. Recommended Case Studies**

MTC staff and the consultant team have agreed that a total of four case corridors and three station areas will be selected as case studies. The recommended case studies are as follows:

#### **Corridors:**

- Sonoma/Marin Area Rail Transit (SMART)
- Dumbarton rail (CalTrain)
- BART San Jose extension
- eBART

#### **Station areas:**

- Petaluma downtown station (SMART)
- Union City station (Dumbarton rail/BART)
- Vallejo ferry terminal

### **2. Case Study Corridor Methodology**

The case study corridors will serve as an opportunity to test the proposed TOD policy thresholds and the Corridor Working Group methodology. The corridor case studies will be based on existing station area data and corridor-level planning documents, supplemented with limited local plan review and field observation of some stations, particularly those for which previous projections and scenarios span a relatively broad range or appear incompatible with local land use plans. The corridor methodology is discussed in the following sections.

## **2.1 Corridor Information Gathering**

Existing data for the case study corridors is being compiled and mapped, including:

- General Plan land use (from ABAG data)
- Aerial photographs
- Census 2000 population, households and employment by Transit Service Area (from MTC)
- Projected 2030 population, households and employment by Transit Service Area (from ABAG Projections '03)
- Projected 2025 scenario population, households and employment by Transit Service Area (from ABAG Smart Growth Vision)
- Street connectivity index (from Center for Neighborhood Technology/CTOD)

Additional information to be reviewed for the case study corridors includes:

- Previous studies, including BART studies of eBART and BART to San Jose and SMART Station Area Report (to be provided by MTC)

## **2.2 Evaluation of Proposed TOD Policy Thresholds**

Validating the proposed TOD Policy Thresholds is a key purpose of the case study effort. We propose to evaluate each corridor's potential to achieve the thresholds by calculating the proposed thresholds for each corridor using household, population and employment figures from several sources.

### **A. EXISTING CONDITIONS AND PREVIOUS PROJECTIONS**

Initially, for each of the selected case study corridors, a matrix will be prepared comparing the existing (year 2000) and projected population, households and employment figures for each of the station areas, and average figures for the entire corridor, against the proposed thresholds of population and the sum of population and employment. These comparisons will be made using **Census 2000** and **Projections '03** figures.

### **B. GENERAL PLAN LAND USE**

In addition, comparative estimates of the population, household and employment capacity for each station area based on local **General Plan land use** will be developed by the consultant team, using methods described below. As with the previous projections, these General Plan buildout estimates will be summed and averaged for the corridor for comparison to the proposed policy thresholds.

For population and household estimates, the methodology is fairly straightforward. Because of the regional housing market dynamics in the Bay Area, where nearly all forms of housing are in very high demand, land planned for housing will be anticipated to build out at close to the planned density. Using the low end, mid-point and high end of the residential density ranges listed in ABAG's General Plan Land Use coverage, a range of household numbers will be generated based on the acreage within the Transit Service Area of each type of residential land use. Where necessary, population figures will be derived from household-level estimates using Strategic Economics' average household size estimates for households seeking to locate near transit in the various counties.

Estimating employment based on General Plan land use is more challenging. Due to local fiscal and economic development concerns, jurisdictions often plan for the maximum amount of commercial or office development they hope to attract to their community. The sum total of land designated for employment in a corridor or county may thus accommodate many times the amount of commercial development that is anticipated under regional or county-level projections. To ensure the General Plan-based employment estimates are in line with county and regional employment projections, Strategic Economics will provide long term, corridor-level employment demand estimates based on their research from Task 4, which will be used to constrain the amount of employment assumed in transit areas to a reasonable proportion of anticipated employment growth in each county.

To generate local plan building figures for areas with mixed-use General Plan designations, we will need to make assumptions regarding the mix of employment, retail and services, and the level of intensity of development contemplated in local plans. In these areas, Calthorpe Associates use its professional judgment to assign development types based on other TOD prototypes around the country, keeping in mind the prevailing development patterns in the corridor and Strategic Economics' TOD market assessments for each county.

Because the work scope does not permit the detailed review of these General Plan estimates with all the local jurisdictions in these corridors, nor the detailed review of field conditions in all 38 station areas along the case study corridors, the General Plan buildout figures for individual station areas should be for internal use. These figures should be released to the public only as corridor-level sums or averages and not as individual station area figures.

### C. ESTIMATED TOD POTENTIAL

Finally, estimates of **TOD potential** for housing, population and employment for the case study corridors will be developed by the consultant team. These estimates will be informed by the ABAG Smart Growth Vision figures, additional studies made available to the team, successful TODs in comparable situations in other parts of the country, and the consultant team's research and professional judgment.

Because the work scope does not permit the detailed review of these estimates with all the local jurisdictions in these corridors, nor the detailed review of field conditions in all 38 station areas along the case study corridors, the consultant team's TOD potential estimates for individual station areas should be for internal use. These figures should be released to the public only as corridor-level sums or averages and not as individual station area figures.

### 2.3 Ridership Estimates for Case Study Corridors

Parsons Brinckerhoff will calculate estimates of the change in ridership resulting from TOD along the four case study corridors. Ridership estimates will be calculated by applying elasticities for estimating transit ridership changes as a function of residential and employment density from "state of the practice" research to existing ridership projections for the corridors. This analysis will review and incorporate, where applicable, estimates of transit ridership generated by TOD that are included in existing corridor ridership projections. Interviews with MTC and the agencies responsible for

the existing transit corridor ridership demand projections will be conducted to verify the results of our analysis.

## **2.4 Corridor Working Group**

For each corridor, the results of the above analysis, and where applicable the results of the station area case study within the corridor, will be presented to and discussed with Corridor Working Groups in a corridor roundtable discussion. Led by Congestion Management Agencies and convened by MTC, these working groups will review the proposed thresholds in light of the various estimates and will provide input on policy, technical and procedural issues, including the following:

### **Timing and Order of Proposed Policy Interventions**

- Is staff's proposed timing for MTC involvement and threshold evaluation appropriate and effective, or does MTC need to define an earlier state of involvement prior to the EIR?

### **Performance Measures and Thresholds:**

- Do the proposed performance measures work well for the various modes considered?
- Do the proposed performance measures adequately reflect the capability of transit projects to serve recreational and other non-employment destinations?
- Should jurisdictions or corridors be allowed to choose whether to use population density or combined population/employment density as the threshold?
- How achievable in the development market are the employment projections anticipated in local land use plans?

### **Process**

- Does the Corridor Working Group concept make sense? What responsibilities, authority and funding approaches can help corridor-level planning succeed?
- What incentives can MTC use to strengthen existing transit corridor groups so that they can take on the role of evaluating TOD thresholds?
- What is the preferred relationship of the Corridor Working Groups to CMAs, cities, transit agencies, and other governments or agencies?

The results of this input will be documented in the final Case Study Report.

## **3. Station Area Case Studies**

The three station area case studies provide an opportunity to explore the potential for TOD in greater detail and with more input from local jurisdictions. They also provide an opportunity to test some aspects of MTC's proposed Station Area Planning process.

### **3.1 Information Gathering**

For station area case studies, the following information will be sought from local jurisdictions, CMAs and transit providers:

#### **Parcel-level GIS data**

- Parcel shapefile with APNs

- Assessor data (tabular) including APN, assessor's use code, ownership, date of last sale, assessed building value and assessed land value.
- Road centerline coverage with street names

**Relevant Studies**

- Traffic volumes, capacities and planned improvements in the vicinity of the station
- Relevant General and/or Specific Plan goals and policies for station areas
- Existing and planned transit service levels

**“Potential for Change” Assessment**

- What uses are likely to remain in the mid-to-long term?
- What uses are likely to redevelop?
- Architecturally significant structures and major community assets.

This information will be used to create and annotate base maps for field review and to inform the development of a TOD buildout program for each case study station area.

**3.2 Field Review and Interviews**

A site visit and working session will be scheduled for each of the station areas. At this session, Calthorpe Associates and Strategic Economics will walk the study area, field-check data compiled, generally note the character and condition of existing development, identify key sites likely to be developed or redeveloped, and photograph representative conditions. Local planners will then be interviewed regarding previous planning efforts, zoning, planned projects and public improvements, and development projects recently submitted or approved. This information will be used to develop a base map for each station area illustrating existing uses and development opportunities and constraints and a narrative description of planning and development issues in the station area.

**3.3 Transit Station Area Development Roundtable**

For each of the case study station areas, a desirable and feasible development program for station area will be developed in a roundtable working session including local planners, developers and real estate professionals. Participants in this effort could include the following:

- Planning/Community Development staff
- Redevelopment agency staff
- Transit agency staff
- Property owners/managers (particularly of larger or multiple parcels, shopping centers, office parks, etc.)
- Real estate brokers
- Developers
- Chambers of Commerce or other business interest group representatives
- Community group representatives

This development program will be used to evaluate the station area's current and future population and employment and compare them to the TOD policy thresholds. In consultation with local planners, the consultant team will compile a list of invitees to each roundtable. Venues for the roundtables will be arranged by the local jurisdictions or CMAs.

### **3.4 Station-Area Performance Measures and Thresholds**

Data permitting, the following performance measures will be evaluated for the selected case study station areas:

- **Regional Employment Center Access** – Measure the distance and approximate travel time between the station area and existing regional employment centers identified by Strategic Economics.
- **Mix of Uses** – Determine the degree of homogeneity or mix of existing land uses in each station area for existing conditions as well as the proposed station area development program.
- **Street Connectivity** – A connectivity measure for the existing street network has already been assessed for each station area by CTOD/Center for Neighborhood Technology. If the station area development plan involves the creation of new streets, a similar connectivity measure will be estimated for the proposed future street network.

### **3.5 Recommendations**

At the station area level, recommendations will be made regarding the following issues, based on input from participants in the case study effort:

#### **Timing and Order of Proposed Policy Interventions**

- What is the ideal timing of the station area planning effort, and what is its ideal relationship to the rest of the approval and funding process?

#### **Performance Measures and Thresholds:**

- Do the proposed performance measures work well for the various modes considered?
- Are the specific definitions of the thresholds (i.e. population and job density per square mile) workable, as compared to measures typically used by transit agencies (e.g. ridership) or jurisdictions (e.g. net residential density)?
- Should jurisdictions or corridors be allowed to choose whether to use population density or combined population/employment density as the threshold?
- How achievable in the development market are the employment projections anticipated in local land use plans?
- Should a minimum number of housing units for each station be established?

### **4. Case Study Report**

An illustrated report will be prepared to document the results of Tasks 1 through 3.